

AMENDMENTS TO THE CLAIMS

1. **(Currently Amended)** An isolated polypeptide comprising:
 - a) an amino acid sequence as set forth in any one of ~~SEQ ID NOS.~~ SEQ ID NOS: 1, 3, 5 or 7; or
 - b) a functional fragment or variant of the polypeptides in a) above, wherein the fragment or variant provokes a humoral and/or cellular immunological response in an animal with similar characteristics to that produced by a polypeptide as outlined above.
2. **(Currently Amended)** An isolated polypeptide as claimed in ~~claims claim~~ 1 wherein the functional fragment or variant incorporates a B cell or T cell epitope of the polypeptide.
3. **(Currently Amended)** An isolated nucleic acid molecule wherein the molecule:
 - a) comprises a nucleotide sequence as set forth in any one of ~~SEQ ID NOS.~~ SEQ ID NOS: 4, 6 or 8;
 - b) is a functional fragment or variant of the molecule(s) in a); or
 - c) is able to hybridise under stringent conditions to the molecule(s) in a) or b); or
 - d) is a complement of the molecule(s) defined in a), b) or c); or
 - e) is an anti-sense sequence corresponding to any of the sequences in a) - d).
4. **(Currently Amended)** An isolated nucleic acid molecule encoding a polypeptide as claimed in ~~claim 1 either claim 1 or 2.~~
5. **(Original)** A vector or construct comprising the nucleic acid molecule as claimed in claim 4.
6. **(Original)** A host cell which has been transformed with a vector or construct as claimed in claim 5.
7. **(Currently Amended)** An isolated ligand which binds to a polypeptide as claimed in ~~claim 1 either claim 1 or 2.~~
8. **(Original)** A probe capable of hybridizing under stringent conditions to a nucleic acid molecule as claimed in either claim 3 or 4.
9. **(Currently Amended)** A probe for a polypeptide as claimed in ~~claim 1 either claim 1 or 2.~~

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10. **(Original)** A probe for the ligand of claim 7 when the ligand is bound to the polypeptide.

11. **(Currently Amended)** A method for determining whether an animal is inclined to develop immune resistance to a nematode infection characterized by the steps of:

- a) obtaining a blood or serum sample from the animal;
- b) preparing an IgE enriched or IgG depleted preparation of the sample in a);
- c) contacting the sample at a) with a polypeptide comprising the amino acid sequence of any one of ~~SEQ ID NOS.~~ SEQ ID NOs: 1, 3, 5 or 7 or a functional fragment or variant thereof;
- d) contacting the preparation from c) with a probe for the immuno-complex formed by IgE and the polypeptide;
- e) detecting the probe to identify the immune status of the animal by the presence or absence of the probe.

12. **(Currently Amended)** A method for determining whether an animal is inclined to develop immune resistance to a nematode infection characterized by the steps of:

- a) obtaining a blood or serum sample from the animal
- b) preparing an IgE enriched or IgG depleted preparation of the sample in a);
- c) exposing the preparation from b) with a polypeptide comprising the amino acid sequence of any one of ~~SEQ ID NOS.~~ SEQ ID NOs: 1, 3, 5 or 7 or a functional fragment or variant thereof;
- d) washing the preparation from c) to remove any unbound IgE (i.e. IgE that is not bound to the polypeptide);
- e) ~~detection of~~ detecting the immuno-complex formed by the polypeptide and IgE at step c) with monoclonal antibodies to IgE[.] ; and
- f) ~~detection of~~ detecting IgE with appropriately labeled anti-antibodies.

13. **(Currently Amended)** A method of determining whether an animal is inclined to develop immune resistance to a nematode infection characterized by the steps of:

- a) exposing a portion of the animal's skin to a polypeptide comprising the amino acid sequence of ~~SEQ ID NOS.~~ SEQ ID NOs: 1, 3, 5 or 7 or a functional fragment or variant thereof; and

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b) determining the immune status by the presence or absence of an immune or allergic reaction.

14. **(Currently Amended)** A method for whether an animal is inclined to develop immune resistance to nematode infection characterized by the steps of:

- a) determining the immune status of male and female animals via the use of Tco-aspin, Oc-aspin and/or Hc-aspin;
- b) selecting males and females disposed to develop immune resistance to nematodes; and
- c) using selected animals to breed progeny resistant to said infection.

15. **(Currently Amended)** An isolated polypeptide as claimed in ~~either~~ claim 1 or 2 wherein the polypeptide is a functional fragment or variant of ~~SEQ ID NO.~~ SEQ ID NO: 5 having at least 90% homology to ~~SEQ ID NO.~~ SEQ ID NO: 5.

16. **(Currently Amended)** An isolated nucleic acid molecule as claimed in claim 3 wherein the molecule is a functional fragment or variant of ~~SEQ ID NO.~~ SEQ ID NO: 6 having at least 94% homology to ~~SEQ ID NO.~~ SEQ ID NO: 6.

17. **(Currently Amended)** An isolated polypeptide as claimed in ~~either~~ claim 1 or 2 wherein the polypeptide is a functional fragment or variant of ~~SEQ ID NO.~~ SEQ ID NO: 1 having at least substantially 75% homology to ~~SEQ ID NO.~~ SEQ ID NO: 1.

18. **(Currently Amended)** An isolated nucleic acid molecule as claimed in claim 3 wherein the molecule is a functional fragment or variant of ~~SEQ ID NO.~~ SEQ ID NO: 2 having at least substantially 70% homology to ~~SEQ ID NO.~~ SEQ ID NO: 2.

19. **(Currently Amended)** An isolated polypeptide as claimed in ~~either~~ claim 1 or 2 wherein the polypeptide is a 47 functional fragment or variant of ~~SEQ ID NO.~~ SEQ ID NO: 3 having at least 80% homology to ~~SEQ ID NO.~~ SEQ ID NO: 3.

20. **(Currently Amended)** An isolated nucleic acid molecule as claimed in claim 3 wherein the molecule is a functional fragment or variant of ~~SEQ ID NO.~~ SEQ ID NO: 4 having at least substantially 70% homology to ~~SEQ ID NO.~~ SEQ ID NO: 4.

21. **(Currently Amended)** An isolated polypeptide as claimed in ~~either~~ claim 1 or 2 wherein the polypeptide is a functional fragment or variant of ~~SEQ ID NO.~~ SEQ ID NO: 7 having at least 80% homology to ~~SEQ ID NO.~~ SEQ ID NO: 7.

22. **(Cancelled)**

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23. **(Currently Amended)** An isolated nucleic acid molecule as claimed in claim 3 wherein the molecule is a functional fragment or variant of ~~SEQ ID NO.~~ SEQ ID NO: 8 having at least 75% homology to ~~SEQ ID NO.~~ SEQ ID NO: 8.